

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1.-18. (Canceled)

19. (Currently Amended) A camera signal processing apparatus comprising:
an interpolated pixel data generating means for interpolating pixel data in at least two directions based on a position of said pixel data and/or pixel data around said position, said pixel data being generated based on an imaging signal coming from a solid-state image sensor in which an imaging light enters through a color filter having a different spectral characteristic for each pixel, thereby separately generating interpolated pixel data in said at least two directions;

a correlation detecting means for detecting a correlation value indicative of a degree of correlation in each of said at least two directions of said interpolated pixel data generated by said interpolated pixel data generating means,

wherein an offset value is added to the correlation value causing the interpolated pixel data to be weighted by the correlation value approach a direction in which the interpolation is made by arithmetic mean;

a noise canceling means for subtracting a predetermined value from said correlation value detected by said correlation value detecting means;

a weighting means for weighting said interpolated pixel data in each of said at least two directions generated by said interpolated pixel data generating means with said

correlation value detected by said correlation detecting means in each of said at least two directions and adding together the weighted interpolated pixel data in all of said at least two directions to generate interpolated pixel data; and

an image generating means for generating an image based on said interpolated pixel data weighted by said weighting means.

20. (Previously Presented) The camera signal processing apparatus as set forth in claim 19, wherein said noise canceling means has a subtracting means for performing subtraction on the correlation values of said at least two directions; and

a control means for generating a subtrahend for performing subtraction in said subtracting means,

wherein said subtracting means receives said subtrahend generated by said control means to perform subtraction based on said subtrahend.

21. (Original) The camera signal processing apparatus as set forth in claim 19, wherein said noise canceling means comprising:

an absolute value converting means for making absolute the inputted correlation value in each of said at least two directions;

a subtracting means for subtracting a predetermined value from the correlation value made absolute by said absolute value converting means in each of said at least two directions; and

a limiting means for limiting said correlation value subtracted by said subtracting means in each of said at least two directions to a positive value.

22. (Currently Amended) A camera signal processing method comprising the steps of:

interpolating pixel data in at least two directions based on a position of said pixel data and/or pixel data around said position, said pixel data being generated based on an imaging signal coming from a solid-state image sensor in which an imaging light enters through a color filter having a different spectral characteristic for each pixel, thereby separately generating interpolated pixel data in said at least two directions;

detecting a correlation value indicative of a degree of correlation in each of said at least two directions of said interpolated pixel data,

wherein an offset value is added to the correlation value which causes the interpolated pixel data to be weighted by the correlation value approach a direction in which the interpolation is made by arithmetic mean;

subtracting a predetermined value from said correlation value; and

weighting said interpolated pixel data in each of said at least two directions with the subtracted correlation value in each of said at least two directions to generate interpolated pixel data obtained by adding together the weighted interpolated pixel data in all of said at least two directions.

23. (Original) The camera signal processing method as set forth in claim 22, wherein subtraction is performed on said correlation value in each of said at least two directions based on an inputted subtrahend.

24. (Original) The camera signal processing method as set forth in claim 22,
wherein the inputted correlation value in each of said at least two directions is made absolute,
a predetermined value is subtracted from the absolute correlation value in each of
said at least two directions, and
the subtracted correlation value in each of said at least two directions is limited to
a positive value.

25.-56. (Cancelled)